

Alloy Steel ASTM A182 F9 Flanges: A Complete Guide

[Alloy Steel ASTM A182 F9 Flanges](#) are the best choice for the industries which require high temperature, pressure, and demanding operating conditions. They are known for their excellent stability and superior mechanical strength, these flanges play a critical role in keeping piping systems secure, leak-free, and efficient. If you are thinking of sourcing it or for export projects this will guide help you to make your decision.

What are Alloy Steel A182 F9 Flanges?

Alloy Steel ASTM A182 F9 Flanges are forged flanges and are a part of ASTM A182 standard. It is made from a combination of chromium and molybdenum designed specifically for high-temperature and high-pressure environments. Their chromium content helps them protect against oxidation, scaling, and chemical corrosion, and molybdenum content provides them with additional strength making them suitable for extreme working conditions.



Why choose Alloy Steel ASTM A182 F9 Flanges?

Choosing Alloy Steel ASTM A182 F9 Flanges comes up with several key features. These key features are:

- High Temperature Strength
- Leak-Proof Performance
- Durable and Long-Lasting
- Enhanced Toughness
- Strong Corrosion Resistance
- Strong Weldability

- Long Service Life
- Cost Effective

Applications of Alloy Steel ASTM A182 F9 Flanges:

- Power Generation Plants
- Oil and Gas Refineries
- Petrochemical Industry
- Power and Energy Infrastructure
- Chemical Processing Plants
- Industrial Boilers & Steam Systems

Specifications of Alloy Steel ASTM A182 F9 Flanges:

Specifications: ASTM A182 F9 Flanges

Alloy Steel F9 Flanges Standards : ASTM, ASME Flanges, ANSI Flanges, DIN Flanges, EN Flanges, BS Flanges etc.

A182 F9 Material Class/ Pressure: 150#, 300#, 400 #, 600#, 900#, 1500# & 2500#

A182 Gr F9 Flanges Dimension: 150#, 300#, 600#, 900#, 1500#, 2500#. PN6, PN10, PN16, PN25, PN40, PN64 etc.

ASTM A182 Grade F9 Flanges Face Type: Flate Face (FF), Raised Face (RF), Ring Type Joint (RTJ)

ASTM A182 F9 Pipe Flanges Size: ½" to 36"

SA 182 Gr F9 Steel Flanges Grade: ASTM / ASME A182 F1 / F5 / F9 / F11 / F12 / F22 / F91

AS A182 F9 RTJ Flanges Wall Thickness: SCH.10, 20, 30, 40, 80, 120, 160, STD, XS, XXS.

Chemical Composition of Alloy Steel ASTM A182 F9 Flanges:

Grade	C	Mn	Si	S	P	Cr	Mo
ASTM A182 F9	0.15	0.3 - 0.6	0.5 - 1	0.03	0.03	8 - 10	0.9 - 1.1

Mechanical Properties of Alloy Steel ASTM A182 F9 Flanges:

Grade	Tensile Strength (Mpa)	Yield Strength (Mpa)	Elongation %
A182 F9	275	485	20

Conclusion: Alloy Steel ASTM A182 F9 Flanges have proven to be a reliable and high-performing solution for industries that rely on strong, heat-resistant, and corrosion-resistant components. Their exceptional durability, mechanical strength, and resistance to extreme temperatures make them ideal for critical piping systems. Whether choosing it for industrial systems, chemical processing

or for export shipments, F9 flanges provide stable performance and long service life. For engineers and industries that prioritize safety, efficiency, and consistency, ASTM A182 F9 remains one of the most trusted flange materials available today.